

ABSTRACT OF THE DISCLOSURE

A system for simulating a medical procedure performed on a subject, featuring a simulated organ, a simulated medical instrument and a locator for determining the location of the instrument in the organ. The system further features a visual display for displaying images from the medical procedure. The visual display also includes a three-dimensional mathematical model for modeling the organ, which is divided into a plurality of linear segments. The location of the instrument in the organ is used to select the segment, which in turn is used to select the images for display on the visual display.

[illegible]

Figure 6. The effect of the number of iterations on the accuracy of the proposed algorithm. The figure shows the accuracy of the proposed algorithm as a function of the number of iterations for different values of the parameters α and β . The x-axis represents the number of iterations (from 0 to 100), and the y-axis represents the accuracy (from 0.8 to 1.0). The legend indicates four cases: $(\alpha=0.5, \beta=0.5)$, $(\alpha=0.7, \beta=0.7)$, $(\alpha=0.9, \beta=0.9)$, and $(\alpha=1.0, \beta=1.0)$.